



China National Accreditation Service for Conformity Assessment
LABORATORY ACCREDITATION CERTIFICATE

(Registration No. CNAS L5329)

Ballast Water Detecting Laboratory of
Shanghai Ocean University

No.999, Huchenghuan Road, Lingang New City, Shanghai, China

is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence of testing.

The scope of accreditation is detailed in the attached appendices bearing the same registration number as above. The appendices form an integral part of this certificate.

Date of Issue: 2011-11-18

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Signed on behalf of China National Accreditation Service
for Conformity Assessment

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CHINA NATIONAL ACCREDITATION SERVICE FOR CONFORMITY ASSESSMENT
APPENDIX OF ACCREDITATION CERTIFICATE
(Registration No. CNAS L5329)

NAME: Ballast Water Detecting Laboratory of Shanghai Ocean University

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APPENDIX 1 SCOPE OF ACCREDITED TESTING

№	Test Object	Item/Parameter		Code of Field	Title, Code of Standard or Method	Limitation	Note
		№	Item/Parameter				
1	Ballast water	1	Total plate count	0128.06	"The specification for marine monitoring Part 7:Ecological survey for offshore pollution and biological monitoring" GB17378.7-2007/10.1 "Standard examination methods for drinking water Microbiological parameters" GB/T 5750.12-2006/1.1		

№	Test Object	Item/Parameter		Code of Field	Title, Code of Standard or Method	Limitation	Note
		№	Item/Parameter				
1	Ballast water	2	Escherichia coli	0128.06	"The specification for marine monitoring Part 7:Ecological survey for offshore pollution and biological monitoring" GB17378.7-2007/9.1,9.2 "Standard examination methods for drinking water Microbiological parameters" GB/T 5750.12-2006/4.1, 4.2		
		3	Vibrio cholerae	0128.06	Vibrio cholerae diagnosis standard WS 289-2008		
		4	Enterococci	0128.06	"Water quality Detection and enumeration of intestinal enterococci Part 2: Membrane filtration method BS EN "ISO 7899-2:2000		

№	Test Object	Item/Parameter		Code of Field	Title, Code of Standard or Method	Limitation	Note
		№	Item/Parameter				
1	Ballast water	5	Phytoplankton	0128.15	"The specification for marine monitoring Part 7:Ecological survey for offshore pollution and biological monitoring" GB17378.7-2007/5.3.2.3 "Water and wastewater monitoring analysis method"Fourth edition (supplement edition) 2002/5.1.1		
		6	Zooplankton	0128.34	"The specification for marine monitoring Part 7:Ecological survey for offshore pollution and biological monitoring" GB17378.7-2007/5.3.3.3 "Water and wastewater monitoring analysis method"Fourth edition (supplement edition)2002/5.1.1		

№	Test Object	Item/Parameter		Code of Field	Title, Code of Standard or Method	Limitation	Note
		№	Item/Parameter				
1	Ballast water	7	Total Suspended Solids	0233.10	"The specification for marine monitoring Part 4:Seawater analysis" GB17378.4-2007/27 "Water quality-Determination of suspended substance substance-Gravimetric method"GB/T 11901-1989		
		8	Dissolved Organic Carbon	0233.10	"The specification for marine monitoring Part 4:Seawater analysis" GB17378.4-2007/34.1		
		9	Total Organic Carbon	0233.10	"The specification for marine monitoring Part 4:Seawater analysis" GB17378.4-2007/34.1 "Water quality—Determination of total organic carbon—Combustion oxidation nondispersive infrared absorption method" HJ 501-2009		

№	Test Object	Item/Parameter		Code of Field	Title, Code of Standard or Method	Limitation	Note
		№	Item/Parameter				
1	Ballast water	10	Chemical Oxygen Demand	0233.10	"The specification for marine monitoring Part 4:Seawater analysis" GB17378.4-2007/32 "Water quality-Determination of permanganate index" GB 11892-1989		
		11	Biochemical Oxygen Demand 5	0233.10	"The specification for marine monitoring Part 4:Seawater analysis" GB17378.4-2007/33.1 "Water quality-Determination of biochemical oxygen demand after 5 days(BOD5)-Dilution and seeding method" HJ 505-2009		

№	Test Object	Item/Parameter		Code of Field	Title, Code of Standard or Method	Limitation	Note
		№	Item/Parameter				
1	Ballast water	12	pH	0233.10	"The specification for marine monitoring Part 4:Seawater analysis" GB 17378.4-2007/26 "Water quality--Determination of pH value --Glass electrode method" GB/T 6920-1986		
		13	Dissolved Oxygen	0233.10	"The specification for marine monitoring Part 4:Seawater analysis" GB 17378.4-2007/31 "Water quality Determination of dissolved oxygen Iodometric method" GB/T 7489-1987		

№	Test Object	Item/Parameter		Code of Field	Title, Code of Standard or Method	Limitation	Note
		№	Item/Parameter				
1	Ballast water	14	Temperature	0233.10	"The specification for marine monitoring Part 4:Seawater analysis" GB17378.4-2007/5.1 "Water quality--Determinati on of water temperature--Therm ometer or reversing thermometer method" GB/T 13195-1991		
		15	Turbidity	0233.10	"The specification for marine monitoring Part 4:Seawater analysis" GB17378.4-2007/30.1 "Water quality-Determinatio n of turbidity" GB/ T13200-1991		
		16	TRO	0233.10	"Water quality Determination of free chlorine and total chlorine Spectrophotometric method using N,N-diethyl-1,4-phe nylenediamine" HJ 586-2010		

№	Test Object	Item/Parameter		Code of Field	Title, Code of Standard or Method	Limitation	Note
		№	Item/Parameter				
1	Ballast water	17	POC	0233.10	"Gulf ecosystem observation method" China Environmental Science Press 2005 / 4.5.14.1		
		18	Salinity	0233.10	"The specification for marine monitoring Part 4: Seawater analysis" GB17378.4-2007/29.1		



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APPENDIX 3 ACCREDITED SIGNATORIES AND SCOPE

No	Name	Authorized Scope of Signature	Note
1	Xue Junzeng	all fields which applied	
2	Wu Huixian	all fields which applied	